

# Cognitive **Theory**

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# What is cognitive theory?

- Branch within psychology that discusses mental processes
- Focuses on : How people think, learn, remember, use problem solving & use language
- Process and store information
- Mental act or process by which knowledge is attained
- Affects the way we process or deal with we



# Memory

- Process of maintaining information over time
- Means by which we draw on our past experiences in order to use information in the present
- Essential in our everyday life uses
- Involves the way we process the storage of info and how we use it
- “ Without a memory of the past we cannot operate in the present or think about the future “
- Good memory = easier to process & learn  
Bad memory = tougher to process & learn



# Stages of Memory

## Stage 1

- Encoding
  - Changing of information to better understand

## Stage 2

- Storage
  - Procedures in which memory is

## Stage 3

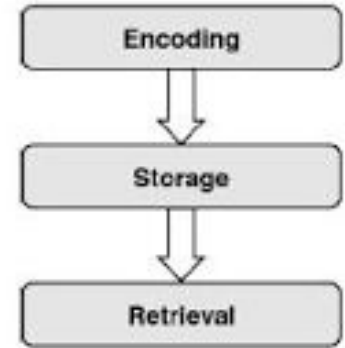
- Retrieval
  - Recovery of memory ways in which memory comes back

### Stages of Memory

Encoding

Storage

Retrieval



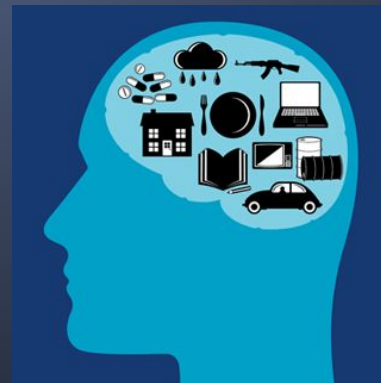
# Stage 1 : Encoding

- In order for proper storage of memory one must change information into a form that facilitates the understanding to better remember
  - 3 procedure to encode information
    - Visuals – (Picture, Icons)
    - Acoustic – (Sound)
    - Semantic – (Meaning)



# Stage 2 : Storage

- Concerns concept of memory storage
  - Where information is stored
  - How long information may be stored (Duration)
  - How much information can be stored at a time (Capacity)
  - What varieties of information may be stored
- Form in which we store information is the way it will be remembered
  - Important to use good strategies to facilitate source of good memory





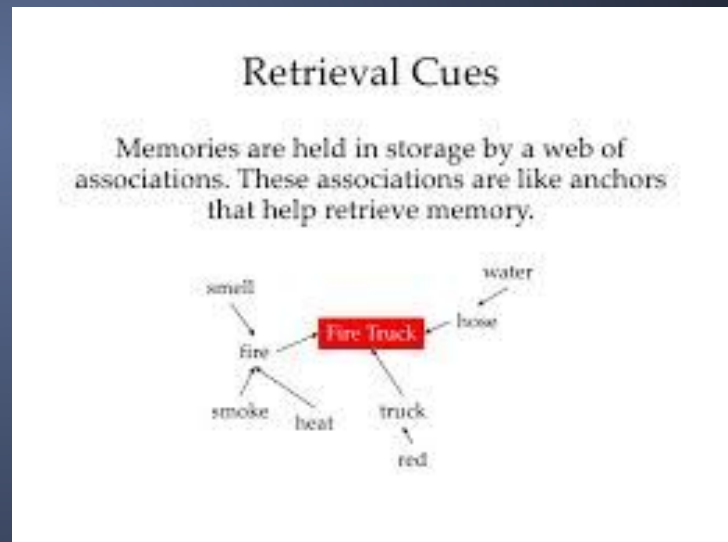


# Stage 3 : Retrieval

- **Retrieval = recovery, recoup or restoration (Process in which info comes back to mind)**
- **If having trouble remembering something it is often do to the lack of efficiency retrieving it**
- **During the process of retrieval the differs from STM to LTM are clear to notice**
- **STM is stored & retrieved sequentially**
  - Ex. If list or words is given & then asked to recall specific word participant go through the list in order in which it was heard
- **LTM is stored & retrieved by association**
  - Ex. Forgetting what one was going to get from one room so in order to retrieve goes back to first place scenario

# Tips on Retrieval

- Organizing information and what helps you process it
- Categorize main details
  - In sequence
  - Alphabetically
  - Size
  - Time
  - Routine
  - Retracing steps





# Forgetting



- Why do we forget?

- **Information is simply no longer available**

- Dealing with STM

- After a while of not practicing or constantly thinking or using information becomes less important to the brain: eventually forget

**OR**

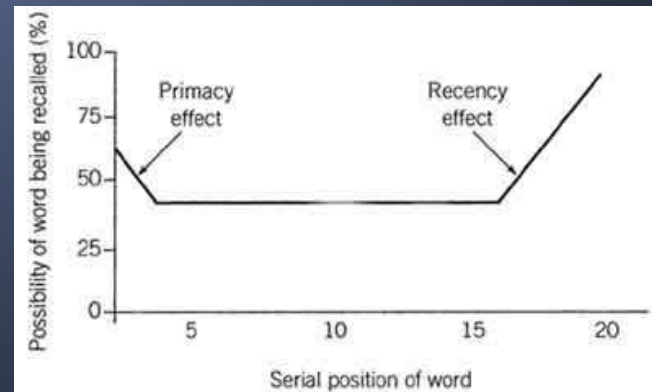
- **Memory is still stored in the memory system however it might not be retrieved as easily as it might have been at some point**

- Dealing with LTM

- Thoughts or ideas might not come to mind as quickly as they did before simply because the memory is not being reminded frequently

# Trace Decay

- **The thought that memory gets worse after a long delay in between “ learning “ and “ recalling “ is argumentative**
  - Trace Decay says that anything between learning and recalling has no affect on recalling or retrieval
  - What actually matters is the frequency of time information is retained
  - The longer period of time the information is not being put to use the memory trace decay decreases and is forgotten
  - All events that are occurring during the time that it is processing to learn and recall get interfere with the new material that is being learned




# STM & LTM

FORGETTING  
INFORMATION FROM  
STM

FORGETTING  
INFORMATION FROM  
LTM

- Involves “Trace Decay Theory”
  - Memories leaves trace in the brain
  - After STM is full and new info is attained old info is blocked and new info takes charge
  - Sequence all latest info is stored while first info is vanished

- Involves “Theories of Interference & Lack of Consolidation”
  - Info interferes with what was most recently learned
  - Often seems like a struggle to learn new tasks because old procedures of tasks is what the mind was used to

	Short Term Memory	Long Term Memory
Capacity	7 +/- 2 items of information	Limitless
Duration	18 - 30 seconds	Up to a lifetime
Encoding	Mainly acoustically	Mainly semantically

# Work cited

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